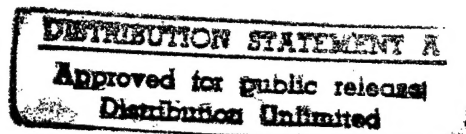


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4 June 1984



# Worldwide Report

EPIDEMIOLOGY

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4 June 1984

# WORLDWIDE REPORT EPIDEMIOLOGY

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DANISH RESEARCHERS DEVELOPING MALARIA VACCINE

Copenhagen BERLINGSKE TIDENDE in Danish 25 Apr 84 p 6

[Article by Henning Ziebe]

[Text] In the State Serum Institute great expectations are rising for the first few milliliters of vaccine that will be tested on squirrel monkeys as soon as the monkeys arrive in Denmark. Enormous hidden Danish resources in medicine for developing countries.

A little glass in a refrigerator in the State Serum Institute contains a few drops of a fluid that has taken six years to make at the cost of a great deal of research and laboratory work and by the quite literal use of blood from teachers and laboratory workers to boot.

These few milliliters of fluid will perhaps prove to be the world's first effective malaria vaccine for human beings. A vaccine that not only WHO, but also very large parts of the medical world hope will be made quickly, because malaria is an illness that hits 250-300 million people a year, and that in the tropical parts of Africa alone, south of the Sahara, costs the lives of one million children a year under five years of age. Not only is the fight against the malaria mosquito about to fail because the mosquitoes become resistant to the pesticide, but the parasites also quickly become resistant to the usual malaria medicine. The problem is about to get out of hand.

Waiting for the Squirrel Monkeys

Therefore the whole world is waiting for a vaccine. And at the State Serum Institute in Copenhagen Dr. Soren Jepsen and his co-workers in Chief Doctor Nils Axelsen's section are on the road to finding a malaria vaccine.

They are ready to test it on some squirrel monkeys, but in spite of the order, the four monkeys had not gotten any farther in September than to England on the way from South America. If the monkeys arrive soon, and the first attempts are positive, a large experimental series will be made, and in three years the vaccine should be ready -- whether it will be the Danes or those abroad with much greater resources who come first. But with continued help, the Danish vaccine could be ready in three years.

## Malaria in the Heating Cupboard

"We have come so far that we have now selected two materials from many that we justifiably have great hopes for, and therefore we are naturally waiting eagerly for the monkeys so we can go forward," Jepsen said.

The team at the Serum Institute started in 1976 to investigate whether one could measure in blood samples whether adults had antibodies against malaria. This could be shown. After this, they began to cultivate malaria parasites from malaria patients. They are cultivated in the heating cupboard together with human red blood cells, human serum, and other things, and in them one can find some proteins just like the ones found in malaria patients.

The researchers have made a good hundred blood tests on adult Africans who are immune to malaria, and in a gigantic jigsaw puzzle they have put them together with a whole group of proteins from the institute's malaria cultures that the personnel have contributed blood to.

In this way they found their way to a collection of 8-10 proteins among which something must be found that stimulates the human being to become resistant. And they think that one or more of them can be used for the vaccine. There is one in particular that they have great hopes for. And not the least reason for optimism is that they are working with ingredients from human beings and not some kind of material that is different in kind.

## Resplicing

They have received support from the government's medical science research council, DANIDA, and from certain private funds, and now they will possibly get 50 of the little squirrel monkeys, each of which costs 5,000 kroner. The monkeys must be cared for 24 hours a day.

The future path, if furthering testing proves positive, goes by way of a re-splicing technique to make synthetic peptides as vaccine that people should only take at most twice in a lifetime. Several research groups have come a long way. In New York, they are about ready to test a vaccine on monkeys, but it is not good enough yet. In Australia, they have spent millions and found a material very much like the Danish material. Now the Australians will test it on monkeys together with the Americans.

9124

CSO: 5400/2525



## BRAZIL

### BRIEFS

**YELLOW FEVER IN PARA**--The Ministry of Health has reported a yellow fever outbreak in Para State and in Amazon Region, where 15 cases were registered during the first 4 months of 1984. [Summary] [PY051426 Sao Paulo Radio Bandeirantes Network in Portuguese 0230 GMT 28 Apr 84]

**YELLOW FEVER INCIDENCE INCREASES**--The nearly 250,000 cases of yellow fever registered in Brazil in 1983 is practically double the number of cases registered in 1980-81, according to Professor Doctor Vicente Amato Neto, one of the best experts on tropical diseases in Brazil. This index of incidence puts Brazil back into the situation prevailing in the 1950's. [Summary] [PY051426 Rio de Janeiro JORNAL DO BRASIL in Portuguese 6 May 84 p 12]

**DIPHTHERIA OUTBREAK IN CEARA**--There is a diphteria outbreak in Ceara State where 18 children, aged between 6 months and 1 year, have died over the past 20 days. [Excerpt] [PY051426 Sao Paulo Radio Bandeirantes Network in Portuguese 1000 GMT 12 May 84]

**MILLIONS STARVE IN NORTHEAST**--According to a report published by the Brazilian Agrarian Reform Association, 10 million persons, mostly children under 5 years of age, have died of hunger and malnutrition over a 4 year period in Brazil's northeast region. [Excerpt] [PY051426 Madrid EFE in Spanish 1443 GMT 22 Apr 84]

CSO: 5400/2064

DENMARK

# AUTHORITIES INCREASINGLY CONCERNED OVER MENINGITIS EPIDEMIC

Randers Area Is Center

Copenhagen BERLINGSKE TIDENDE in Danish 15 Apr 84 Sect II p 3

[Article by Thomas Uhrskov: "Fear and Hysteria in Randers"]

[Text] The meningitis epidemic has led to the cancellation of meetings, athletic events, celebrations, and confirmations -- and many don't dare drive through the city.

Birte and Bent stand completely alone on the large, shiny dance floor. Today 250 pairs were to have competed with each other, but with the exception of Birte and Bent, no one came.

It is the fear of catching the deadly dangerous, very rare illness, meningitis sepsis, that is holding Randers and its 60,000 inhabitants almost completely isolated from the rest of the country.

"It seems as if the town had gotten foot and mouth disease. It is as if a steel ring had been set up around the whole city. There are even people who no longer dare to drive through Randers by car -- it is completely hysterical," the dancing teacher, Bent Aagaard, said, who had to cancel the large, annual dance tournament because of mass withdrawals from 12 out-of-town dance schools.

For several months the feared illness has ravaged the area. One young man is dead -- ten others barely survived. A total of 22 young people have been hit by meningitis.

Last Friday the health authorities decided to vaccinate 14,000 young people between 10 and 19. The vaccine is supposed to cut down the epidemic. And maybe it will. But at the same time, the decision has called forth violent reactions in an around Randers, reactions that the doctors agree in calling hysterical.

Children faint. Adults dare not drive to or from Randers. Youth meetings are cancelled -- or boycotted. And the business community is afraid that the shops and the large department stores will lose the Easter sales.

First the children, for they are the ones hit by the illness.

Does it Hurt?

A hygienist, two nurses, and three doctors with 410 one-shot syringes have set up operation in a classroom at Vorup school in the northern part of Randers.

With the green tablecloth under the hypodermic needles and the nervous pupils in the hall, the area reminds one of an examination. But there are no questions about grades. The questions, put in innumerable different ways, all deal with the same thing: Does it hurt? Will it make me sick?

Five pupils stand in the hall and wait. The boys with their hands deep down in their pockets. The girls with their fingers entwined in a tight ball under their chins.

"It's quite a lot of fun," one thin little boy says. But his face says that he is not so convinced about the fun of the situation.

"I'm supposed to go riding the day after tomorrow. May I?" a young girl wants to know as she gives the former medical health officer, Otto Christiansen, permission to inject her.

The two doctors, who know how to vaccinate, can handle 300 children per hour. Nevertheless, the classes have to wait a few minutes outside the "clinic," and the pupils eagerly use this time to get each other excited. More and more begin to cry, some of them refuse to allow themselves to be injected, but after a few calming words from the teachers, they grit their teeth and get in line again.

In spite of the whining, crying, and sometimes shouting, the hysteria is still not as acute as it was at the Randers technical high school where 125 pupils got fierce headaches, threw up, or fainted after the vaccination.

An hour has passed. The doctors have gotten to the 9th grade. And the hysteria is growing. Suddenly a girl rushes away. "I don't want to, I don't want to!" she shouts as she runs down the hall. Others are more down-to-earth.

"Can I smoke now that I have been vaccinated," a boy asks.

"No, all next week you have to stay away from cigarettes," the former health officer answers with a badly concealed grin.

At the other end of the area, a solarium-tanned, red-headed girl is ready to receive the little prick under her collarbone. She has unbuttoned her shirt much farther than necessary. And as she coquettishly and quite consciously writhes in pain at the little prick, she smiles at the young doctor.

Then she faints.

And on the floor below, in the 5th grade, four pupils feel so bad they have to lie down on the floor until they can be driven home.

#### They Feel They Are Infected with the Plague

Head Doctor Preben Elling of the Central Hospital in Randers said, "The fact that so many pupils feel bad after being vaccinated can be explained as a sort of psychological chain reaction. They get each other excited and actually expect something or other to happen. But another explanation is probably also that many children believe that live bacteria are being injected into their bodies. But the Vaccine is the so-called 'killed vaccine' that can in no way make anyone sick."

While hysteria among children is in this case understandable and under control, it is different with the "panic" in the areas around Randers.

Jorgen Winther, a practicing doctor in the city, told BERLINGSKE: "Of course we and the duty doctors get many calls because of the epidemic, but there is absolutely no panic here in the city. The panic is in the towns around Randers. There the people have a somewhat confused picture of the problem. There are many examples of people not daring to come into the city -- even family and confirmation celebrations on the edge of Randers are considered too dangerous."

The panic has now spread to Sweden, too.

A Swedish bicycle club near Jonkoping was invited to a friendly race against the local club in Randers. At first the Swedes said yes, but after the epidemic became known in Sweden, the club's answer became "Maybe."

A large scout meeting was also boycotted last week. Parents simply forbade the children to take part in the yearly scout leader celebration.

It is cancellations such as this that have made the business community in the city fear that the Easter sales will be lost this year. Many people in the surrounding communities will certainly think twice before deciding to come to Randers to make Easter purchases. If many decide to go to Aarhus instead, the large FDB discount store south of town will particularly have to suffer.

The resistance to approaching the "meningitis city" has begun to infect the citizens of Randers. Chief Doctor Preben Elling says that many people are calling him up to ask whether from a purely moral point of view they can allow themselves to go outside the Randers area.

"The people feel they are infested with the plague," the chief doctor said.

#### Disease Carriers in Other Cities as Well

"But there is no special risk that applies specially to the Randers population. There are just as many disease carriers in Aarhus and Copenhagen as in Randers.

There is therefore talk of hysteria when people don't dare come here," Elling said. He continues, "Investigations have been made that show that school children in Arhus are just as much disease carriers as the children in this city. The investigations showed that in both places between 30 and 40 percent of the pupils have meningococci in the throat (meningococci are bacteria that transmit meningitis if the organism for one reason or another cannot form antibodies, ed.). But the number is much lower for the type of meningitis that has now broken out. But I am convinced that the seeds of the illness are found in great quantities over the whole country."

In the opinion of the chief doctor, the many cases of the illness are not due infection. But the cause of the epidemic is not clear yet.

"We are working with two theories. Either it is a new type of meningitis -- a tougher type. Or it may also be that the influenza wave has brought a new virus that paves the way, so to speak, for the meningococci -- a virus that destroys the meningitis antibodies that all adults and by far most children have in their bodies. But as I said, we don't know yet."

Neither does anyone know how long Randers will stay in isolation.

In the city the people hope that the quarantine will not last long. Even if one well understands the parents who are keeping their children from the city, everyone is agreed that it is really nonsense.

#### Student From U.S. Latest Case

Copenhagen BERLINGSKE TIDENDE in Danish 21 Apr 84 p 3

[Text] The doctors at the Central Hospital in Hillerod confirmed yesterday a case of meningococcic-meningitis in a pupil at the Frederiksborg State School.

The patient is an 18-year-old young man from the U.S. who is on an exchange student visit in Denmark. According to Medical Officer Jens Steensberg, the young man is recovering well.

Steensberg said that the meningitis concerned is contagious, but that there is very little chance that more cases will occur.

The medical officer stressed that the illness can be dangerous, and he urges the parents of school children to be alert if their children get sick and have a high fever or are noticeably hit by an infection. In these cases, the parents should get a doctor.

Steensberg also said that there is no need for further measures concerning the case in question.

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CSO: 5400/2524

## BRIEFS

MOSQUITO CONTROL--Local health authorities are appealing to families particularly in rural areas to assist in preventing the breeding of mosquitoes which cause "yellow" fever as well as "dengue" fever. Speaking to the GNA, Chief Medical Officer Dr Walter Chin said there is no specific treatment for these diseases which are caused by viruses spread by the Aedes Aegypti mosquitoes. He said these mosquitoes have a tendency to breed particularly in clear water normally found in open drums, coconut shells and ditches around the home. When water has to be stored, he said, containers should be covered. In other cases, however, breeding sites must be destroyed by getting rid of unnecessary water. While there have been no reports of "yellow" fever in Guyana for the past 20 years, and "dengue" fever for the past two years, constant vigilance must be kept to prevent an outbreak of these epidemics which affected at least two countries in the Region a few years ago, Dr Chin added. A number of "yellow" fever cases, he said, were discovered along the Brazil/Guyana border last year when a joint effort was undertaken to bring the disease under control. (GNA) [Text] [Georgetown GUYANA CHRONICLE in English 23 Feb 84 p 7]

CSO: 5400/7563

MOST MALARIA DEATHS IN ORISSA, GUJARAT

Bombay THE TIMES OF INDIA in English 6 Apr 84 p 8

[Text] New Delhi--The health authorities are appalled by the apathy, bordering on insensitivity, of the administrations in Gujarat and Orissa which account for the largest number of persons stricken or killed by malaria.

As much as 57 percent of the deaths from falciparum malaria have occurred in Orissa. As for Gujarat, there has been a 20 percent increase in the incidence of the disease in the state.

Of course, there has been an increase in the incidence of malaria in Jammu and Kashmir, Rajasthan, Tamil Nadu, Uttar Pradesh, Andaman and Nicobar islands, and Goa, Daman and Diu. But the authorities in these states and Union territories have been providing the requisite manpower, material and monetary input for the programme for containment of the disease. Incidentally, malaria eradication is included in the top priority 20-point programme.

Hike in Aid

The Centre's assistance to the states for the programme has been raised this year to Rs 94 crores--a 50 percent increase over that in 1983-84 (Rs 69 crores).

The health minister, Mr Shankaranand, has since written to the chief ministers to pursue the programme on an emergency basis particularly in view of bacterial resistance to drugs and DDT.

In spite of the urgency invested in the programme, monitoring of the position in various states shows that Orissa and Gujarat lag alarmingly behind.

This prompted Mr Shankaranand to write to the chief ministers, drawing their attention to the urgency of the problem.

In his letter to the Orissa chief minister, he is believed to have asked for intensification of spraying operations. Central assistance on this account was to be of the order of Rs 2.23 crores but the allocation had to be cut down by as much as 40 lakhs this year because the state government did not provide the matching grant. The National Malaria Eradication Programme is centrally sponsored and the cost is shared equally by the Centre and the state.

The health minister has pointed out that "delay and inadequate release of funds have resulted in serious lapses in spraying schedule and also in the quality and coverage of the spraying operations. As a result, the incidence of malaria with preponderance of malignant malaria continues to remain high. The number of deaths in Orissa attributable to malaria is the highest in the country."

Orissa has also been asked to lift insecticide supplies and expedite spraying operations. In another letter to the Gujarat chief minister, Mr Shankaranand, has pointed out that "because of DDT BHC resistance insects 5.5 million population was projected for spray with malathion against which not more than 1.3 million population has been covered.

CSO: 5400/7100



## OFFICIALS QUESTIONED OVER MEASLES DEATHS

New Delhi PATRIOT in English 31 Mar 84 p 6

[Text] Jaipur, March 30--More than 100 children have died of measles in Bhilwara district, BJP member Bansi Lal Patwa informed the State Assembly during zero hour today.

Raising the issue in the House several Opposition members, including Mr Patwa, Mr Gulab Chand Kataria (BJP), Mr Yadu Nath Singh (LD) and Mr Devi Singh Bheti (Janata) took the Government to task for not acting promptly. Quoting a press statement of the district Chief Medical Officer they said that the vaccine was not supplied by the Government as it was "costly."

Health Minister Khet Singh said that soon after receiving information about some deaths, a special medical team of senior officers was despatched to the district. He also informed that the district health officer had denied any press statement.

Speaker Poonam Chand Vishnoi ruled that he would ask the Government to give a detailed statement on the issue.

The House adjourned twice for half an hour amidst uproarious scenes following some indecent remarks on a lady member of the House by a ruling party legislator.

The uproar was triggered off when Congress-I member Bharon Lal Bhardwaj made the remark on BJP member Mrs Ujjala Arora while making a personal explanation during the zero hour.

The entire Opposition protested when Mr Bhardwaj passed the remarks which the Speaker later ruled would be expunged. The Opposition members demanded suspension of Mr Bhardwaj from the House.

The Speaker first adjourned the House for half an hour and when the House reassembled it was again adjourned for another half an hour. Opposition members were calmed when the chief whip and the Minister for Medical and Health Khet Singh Rathore expressed unconditional regret on behalf of his party.

Earlier Mr Bhardwaj also expressed regret over his remarks.

## BRIEFS

SMALLPOX IN BIHAR--Patna, March 29 (PTI)--Smallpox appeared to have resurrected in some parts of Bihar, according to the chief minister, Mr Chandra Sekhar Singh. The chief minister said some cases were reported at Danapur (Patna district), Dhanbad and other places. Initial tests indicated that those were cases of small pox. Laboratory tests were being conducted to confirm it. [Text] [Calcutta THE TELEGRAPH in English 30 Mar 84 p 4]

KALAZAR DEATHS REPORTED--Purnia (PTI)--Kalazar, breaking out in some villages in the Krityanandnagar block of this district, has claimed eight lives over the past 25 days. The disease has affected about 100 people. [Text] [Calcutta THE TELEGRAPH in English 31 Mar 84 p 1]

ENCEPHALITIS IN CALCUTTA--Calcutta March 30--Four persons have died of encephalitis in the city in recent weeks, Mr Abdul Rouf Ansari, Congress(I) MLA, claimed in the Assembly today. Contending that an epidemic of the disease had broken out in slums of central Calcutta due to stagnant drains and piling up of refuse, Mr Ansari urged the state health and municipal departments to take necessary measures. Mr Deoki Nanda Poddar (Cong-I), said it had become "practically impossible" to move on Chitpore Road as there was "a regular overflow of filthy water" on the carriageway. This was because drains had been damaged by the Calcutta Tramways Company and Calcutta Corporation. [Text] [Calcutta THE TELEGRAPH in English 31 Mar 84 p 1]

GASTROENTERITIS IN TAMIL NADU--Thanjavur, April 10 (PTI)--Six persons, including two children, have died during the past three days in an outbreak of gastro-enteritis in Kumbakonam in Tamil Nadu's Thanjavur district. The district collector said today that 250 persons had been treated so far at the Kumbakonam government hospital. [Text] [New Delhi PATRIOT in English 11 Apr 84 p 6] 9459

WEST BENGAL DYSENTERY DEATHS--New Delhi, 15 May (AFP)--Bacillary dysentery and allied enteritic disease have claimed 39 lives in West Bengal State in the past 24 hours, PRESS TRUST OF INDIA reported. About 1,759 have been killed by the diseases in the state so far. A total of 54,931 people were affected since the diseases hit the state in early March, including 2,007 reported today. [Text] [OW151946 Hong Kong AFP in English 1938 GMT 15 May 84]

ASSAM DISTRICT EPIDEMIC--In Assam, Nowgong has been declared an epidemic area following the outbreak of enteritic diseases, which has so far claimed 33 lives in the district. With this the death toll in the state due to dysentery and gastroenteritis has gone up to 92. Cacher and Dhubri Districts were declared epidemic areas earlier. After an intensive tour of some of the affected areas, the state health secretary, Mr Bora, said in Gauhati that control rooms have been set up in every district and subdivisions for speedy deployment of medical staff to check the spread of the disease. Medical and paramedical teams have been rushed to the affected areas. [Text] [BK140456 Delhi Domestic Service in English 0240 GMT 14 May 84]

CSO: 5400/4717

## INDONESIA

### BRIEFS

DENGUE FEVER IN WEST JAVA--Twelve people died this week from Dengue fever in the village of Sadeng (West Java), daily SUARA KARYA reported today. The paper said that the victims were between the ages of six and 15 and that the village had never been struck by the disease before. Medical teams were dispatched to the area, residents were vaccinated and houses were sprayed with a larvicide. Dengue fever, which is carried by the Aedes Aegypti mosquito, was unknown here until 1968. Since then it has menaced many areas. [Text] [BK130331 Hong Kong AFP in English 0535 GMT 12 May 84]

CSO: 5400/4418

## LEGIONNAIRES DISEASE CLAIMS LIVES

Tel Aviv YEDIOT AHARONOT in Hebrew 3 Apr 84 pp 1, 6

[Article by Devorah Namir: "Three Die in Israel After Contracting Legionnaires Disease"]

[Text] Four cases of "Legionnaires disease" were recently identified in Israel. Three ended in death; the fourth victim was saved, thanks to special treatment.

"Legionnaires disease" strikes the respiratory passages, causing acute pneumonia and often ends in death.

Research has established that the disease is caused by a virulent bacterium that is found in algae-rich water in catch basins. Infection occurs when the water is dispersed in air (aerosols), as a result of the operation of cooling towers of air-conditioning systems, sprinkler irrigation and the like.

The disease was first diagnosed in the United States in 1976, during a convention of the American Legion hence the name. At that convention, infection resulted from dispersal of the bacterium by air conditioners. Another massive outbreak of the disease occurred in Spain last year.

The three persons who died of the disease in Israel were an elderly woman tourist, who apparently brought the disease with her from outside the country, and two elderly men. The patient who was saved was a security officer who was hospitalized at Soroqah Hospital in Be'er Sheva. At first the doctors thought that he had pneumonia, but when he did not respond to conventional treatment they suspected that he was suffering from "Legionnaires disease." He received special antibiotic treatment and his life was saved.

Last night the research of Dr Hilel Shoval, Dr Badri Patel and Dr Hilel Berkover of the Hebrew University and Hadassah Hospital of Jerusalem was published; it sheds new light on the disease. The three researchers succeeded in isolating the bacterium, for the first time, from oxygenation pools that are used to purify sewage effluent.

The research showed that irrigation workers in Israel who use sprinklers and workers in fish ponds are exposed to the virulent bacteria of "Legionnaires disease."

The Ministries of Health and Agriculture conducted research, in the course of which blood samples from irrigation workers were examined. It was found that 4.3 percent of the workers in irrigation with partly purified sewage effluent and 4.5 percent of workers in sprinkler irrigation carry antibodies to "Legionnaires disease" bacteria in their blood. This discovery is evidence that in the course of their work these workers were exposed to the bacteria and developed the antibodies in their blood. The research showed that irrigation workers are also exposed to a number of other diseases.

9045

CSO: 5400/4518

## BRIEFS

'JERICHO ROSE' IN JORDAN VALLEY--A number of cases of leishmaniasis in settlements along the Jordan Valley have been reported in recent months, THE JERUSALEM POST learned this week. Leishmaniasis is transmitted by the bite of the Phlebotomus sand fly, and gives rise to an ulcer which often leaves a round scar known as the "Jericho Rose." The typical bite is usually on the face. Most victims are persons sleeping outdoors or in ground-floor rooms, or who are sitting outside on lawns. Today the lesions usually heal with little scarring, since antibiotics prevent secondary bacterial infection. However, it is taken seriously by health authorities, since in some cases the bite of the sand fly can also cause Chaga's disease which is debilitating and affects heart muscles. The Health Ministry has mounted a campaign to protect the settlers in the areas. Preventive measures include spraying lawns, walls and entrances to houses with insecticide, and cautioning people to avoid sitting and sleeping on the ground. [D'Vora Ben Shaul] [Text] [Jerusalem THE JERUSALEM POST in English 19 Apr 84 p 2]

CSO: 5400/4520

VIRAL HEPATITIS, NOT MENINGITIS CAUSING CONCERN

Rome L'ESPRESSO in Italian 22 Apr 84 pp 163-169

[Article by Giovanni Maria Pace: "Infectious Diseases--A Blow to the Meninges"]

[Excerpts] The recent cases of meningitis cannot be considered a true epidemic. They have, however, thrown the spotlight on two serious problems: the menacing return of the bacteria and the disturbing health situation of our country.

Rome--The meningococcus has hit hard, but it has hit people's minds more than their meninges. In Viterbo, where a woman student and a petty-officer cadet died of meningitis at the beginning of March, the people have been seized by panic, the military have been confined to barracks and the pharmacies have been besieged, while the magistrates were seizing suspect hospital files. As in any real pestilence, a hunt was started for the culprit, identified, on this occasion, in an old store of chemical weapons above Lake Vico. At Isernia, the clinics have used up all their "microbe-capturing" tampons; at Chiuro, near Sondrio, the death of a 12-year-old girl induced the school doctor, using a kind of flamethrower, to carry out a collective purification of throats and pharynxes. Making a further impression on public opinion was the tragic case of Paolo Badini, the 17-year-old son of the superintendent of La Scala in Milan, who died in the space of a few hours from what has been diagnosed as viral meningitis.

It is a fearful contagion, then. A serious epidemic. But only in the opinion of the people. "In reality," says Dr Tommaso Stroffolini, whom we went to interview in the Epidemiology Laboratory of the Higher Institute of Health, "the cases of meningococcal meningitis identified in the first weeks of 1984 are slightly fewer than those of the corresponding period of 1983." In the room next door, on the video terminal of the computer that receives the data on the principal diseases from every part of Italy, Mino Curiano has called up the latest graphs and tables: "Technically, one may not speak of an epidemic. For 1984 we have totaled up the usual 700 cases of meningitis that we have been recording for years, and some 30 deaths."

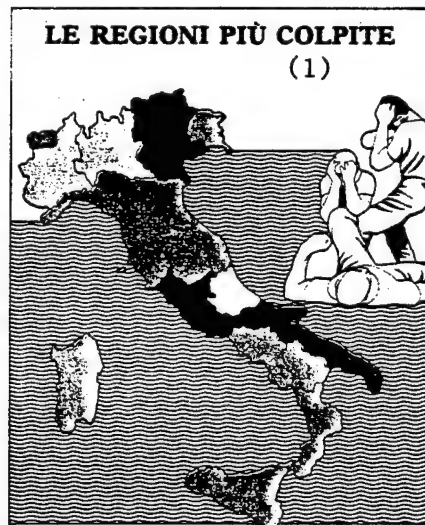




Key:

- |   |             |
|---|-------------|
| 1. Meningitis from One Year to the Next | 4. January  |
| 2. Cases in 1983                        | 5. February |
| 3. Cases in 1984                        | 6. March    |
|   | 7. Weeks    |

The graph above compares the course of meningococcal infection in the first weeks of 1983 and of 1984. As one sees, the number of cases in 1984 is not, on the whole, higher than that of last year. With the end of March 1984, the "epidemic" can be said to have been overcome.



Key: 1. The Hardest-Hit Regions

The graph above indicates with the darkest shades the regions (Trentino-Alto Adige and Lazio in particular) where the cases of meningitis were most numerous in the first months of 1984.

Finally, the return of the bacteria results, according to Dr Stroffolini, from this factor: the deterioration of the environment, a "term" under which the epidemiologist puts pollution, poor housing conditions of certain classes of the population, stress, overcrowding of the cities. Attention shifts, at this point, from the 700 cases of meningitis per year--an incidence comparable to that in France and England--to the 30,000 cases of viral hepatitis, to cholera, to the typhus that rages in the South. With these diseases, Italy finds itself at the level of the nations of the Third World. "How could they have thought, Dr Stroffolini asks, "to reduce Italy to such wretched conditions without paying the consequences?" According to prudent estimates, viral hepatitis carries off about 12,000 Italians per year. This is a big figure, but one that apparently leaves people indifferent. The havoc indeed goes on; sewer discharges are, as always, poured back into the rivers and the sea without treatment. At Naples, billions of lire are being spent to widen the freeway, but an effective system for purification of the dirty waters has still not come.

In 1982, viral hepatitis reached maximum density in Puglia, with 96.3 cases per 100,000 population--about 1 case for every 1,000 persons. Trailing closely were Campania (75.2 per 100,000), Lazio (66.7), Calabria (58.7). In the same year, typhus hit mainly Puglia (36.6 cases per 100,000), and then Molise (13.2), Campania (12.05), Basilicata (8.07).

#### But the Real Danger Is Hepatitis

Rome--The reality is that only 30 Italian die every year from meningitis, and the so-called "epidemic" of recent weeks will not worsen the balance-sheet for 1984. From the point of view of public health, far more serious is the situation with other infectious diseases, with regard to which Italy is fully qualified to be ranked with the developing countries. Viral hepatitis, for example, in types A, B not A not B. In 1983, 30,000 cases of it were reported--a figure that should probably be multiplied by 5, in view of the well-known hesitance to report the disease. Every year, 300 Italians die of fulgurate hepatitis, while 16,500 succumb to primitive cancer of the liver, which is almost always a complication of hepatitis. Another 18,000 Italians die from nonalcoholic cirrhosis of the liver, and a calculation by defect leads to the conclusion that 10,000 of these deaths are imputable to hepatitis. In toto, 12,000 Italians succumb each year to a chronic pathology of the liver that can be connected in various ways to viral infection. An equally disastrous picture is presented for typhus, which in the advanced countries is an historical disease but which in Puglia alone hits 6,000 persons per year.

11267

CSO: 5400/2526

MONOCLONAL ANTIBODIES SPECIFIC FOR DENGUE VIRUS TYPE 4

Beijing JIEFANGJUN YIXUE ZAZHI [MEDICAL JOURNAL OF CHINESE PEOPLE'S LIBERATION ARMY] in Chinese No 1, 20 Feb 84 pp 6-8

[Article by Yan Guozhen [7051 0948 3791], Zhu Qingyu [4376 1987 0151] and Xu Pinfang [1776 0756 5364], et al., all of the Institute of Microbiology and Epidemiology, Academy of Military Medical Sciences: "Monoclonal Antibodies Specific for Dengue Virus Type 4"]

[Summary] Eight hybridoma cell lines were obtained by fusion of mouse myeloma cells and splenocytes from a mouse immunized with dengue-4 virus. Among them, five hybridoma-producing antibodies were type-specific for dengue-4 by direct immunofluorescence assay, two other hybridoma antibodies cross-reacted with dengue-2 virus, and another preparation cross-reacted with dengue-1 virus. Serological characterization of eight hybridoma-producing antibodies was identified by complement fixation, plaque reduction neutralization and hemagglutination-inhibition tests. Two monoclonal antibodies were type-specific in CFT, while the other four monoclonal antibody preparations had low neutralization titers. Then, three type-specific (IFA) monoclonal antibodies were evaluated for their ability to identify five isolates by indirect immunofluorescence assay, and high specificity was obtained. These eight hybridoma cell lines had already secreted antibodies for seven months in vitro and were stored in liquid nitrogen for use in further studies.

9717

CSO: 5400/4137

NEW ROTAVIRUS DISCOVERED

Beijing ZHONGHUA WEISHENGWUXUE HE MIANYIXUE ZAZHI [CHINESE JOURNAL OF MICROBIOLOGY AND IMMUNOLOGY] in Chinese No 1, Feb 84 pp 1-5

[Article by Hong Tao [3163 3447], Wang Changan [3769 7022 1344] and Chen Guangmu [7115 1639 3668], et al., all of the Institute of Virology, China National Center for Preventive Medicine, Beijing: "A New Rotavirus Discovered from Adult Epidemic Diarrhea in China"]

[Summary] Recently there have been several severe outbreaks of non-bacterial diarrhea in China. The disease had a very short incubation period, with cholera-like symptoms. Antibiotics were not effective, but the illness was self-limited with a duration of about six days. A new rotavirus was discovered and incriminated as the causative agent of the adult non-bacterial diarrhea. The new rotavirus has been substantiated by the following principal facts: (1) Rotavirus-like particles were visualized by electron microscopy in 101 out of 106 (95 percent) fecal samples. (2) Serological studies failed to show any antigenic relationship to the ordinary rotaviruses as detected by ELISA, RPHA. (3) The pattern of the genome (RNA) of the agent on electrophoresis appeared to be distinct from any rotaviruses hitherto described. (4) The virus seemed quite unstable morphologically, and the particles seen in the stool supernatants were mostly degraded and occurred as smooth spherical particles of about 50 nm in diameter, which represent the remaining core components of the new rotavirus after degradation of the capsids. Virus particles with different degrees of degradation were seen in some cases. (5) Out of 45 paired sera from the patients, 18 showed 4-fold CF-antibody rise, indicating the causative significance of the new rotavirus.

CSO: 5400/4142

PEOPLE'S REPUBLIC OF CHINA

SINGLE RADIAL HEMOLYSIS TEST USED FOR ANTIBODY DETECTION

Beijing ZHONGHUA WEISHENGWUXUE HE MIANYIXUE ZAZHI [CHINESE JOURNAL OF MICROBIOLOGY AND IMMUNOLOGY] in Chinese No 1, Feb 84 pp 40-42

[Article by Tian Xin [3944 6580], Wen Yuxin [3306 3368 2946] and Xu Huanzhang [1776 3562 4545], et al., all of the Institute of Microbiology and Epidemiology, Academy of Military Medical Sciences, Beijing: "Application of Single Radial Hemolysis Test for the Detection of Antibodies Against Dengue and Other Togaviruses"]

[Summary] Experiments were conducted to detect the antibodies against dengue, Japanese B encephalitis (JBE) and other togaviruses by single radial hemolysis (SRH) test. A total of 337 serum samples from healthy individuals on Hainan Island, where dengue epidemics were reported in 1980, 12 serum samples from patients convalescing from JBE, and immune mouse ascitic fluids against dengue 1-4, JBE, West Nile and Chikungunya viruses, as well as the sera of healthy people from nonepidemic areas, were tested. The results showed that this technique was as sensitive as the conventional hemagglutination inhibition test (HIT), but more specific than the HIT, and the reproducibility was satisfactory. The test is easy to perform and therefore very useful in large-scale seroepidemiologic studies of togaviruses.

9717

CSO: 5400/4142

EPIDEMIC HEMORRHAGIC FEVER VIRUS ANTIBODIES STUDIED

Beijing ZHONGHUA WEISHENGWUXUE HE MIANYIXUE ZAZHI [CHINESE JOURNAL OF MICROBIOLOGY AND IMMUNOLOGY] in Chinese No 6, Dec 83 pp 366-369

[Article by Chen Boquan [7115 0130 2938], Zhou Guofang [0719 0948 5364] and Hang Changshou [2635 7022 1108], et al., all of the Institute of Virology, Chinese Academy of Medical Sciences, Beijing; also members of the First Infectious Disease Hospital, Beijing: "Studies of Monoclonal Antibodies Against Epidemic Hemorrhagic Fever (EHF) Virus"]

[Summary] Three monoclonal antibodies against EHF virus were obtained by fusion of SP2/0 myeloma cells with spleen cells from BALB/c mice immunized with EHF virus A<sub>9</sub> strain inactivated by ultraviolet rays.

The titer of the monoclonal antibody against EHF virus was between 1/5120 - 1/81920 when tested by indirect fluorescent antibody technique. Monoclonal antibody "25" showed the best neutralizing activity, with a neutralizing index up to 2.5 log<sub>10</sub>. It is interesting to note that monoclonal antibody "25" and "32" can differentiate by NI test the classical EHF virus (A<sub>9</sub> strain) isolated from *Apodemus agrarius* and a virus of a mild form of hemorrhagic fever (R<sub>27</sub> strain) isolated from *R. norvegicus*

Direct immunofluorescent test for EHF with FITC labeled McAb was established. The titer of McAb conjugated to 1/16384. No reaction was found with some arbovirus, Poliovirus type III and Reovirus types I, II and III. Definite blocking effect of EHF antiserum to conjugated 25-1 McAb was observed.

CSO: 5400/4141

IGM, IGG PRODUCTION IN ENCEPHALITIS SERUM INVESTIGATED

Beijing ZHONGHUA WEISHENGWUXUE HE MIANYIXUE ZAZHI [CHINESE JOURNAL OF MICROBIOLOGY AND IMMUNOLOGY] in Chinese No 6, Dec 83 pp 373-376

[Article by Gu Fangzhou [7357 2455 5297] and Sun Yueying [1327 2588 5391], et al., all of the Immunological Department, Institute of Basic Medical Sciences, Chinese Academy of Medical Sciences; Bai Hanyu [4101 3352 3768] et al., Beijing Children's Hospital; Beijing Second Hospital of Infectious Diseases: "Investigation of the Dynamics of Specific IgM and IgG Production in Serum of Japanese B Encephalitis"]

[Summary] The dynamics of specific IgM and IgG production in the serum of 53 patients with Japanese B encephalitis are studied. The dynamics of IgM production are found to have several patterns. The first pattern is characterized by a transient, rapid rise followed by a sharp fall with the same speed. The second IgM becomes detectable one week after the onset of the disease, persists for a short period, then decreases rapidly. The third is shown by a time curve of IgM appearance in the serum on the third day of the disease with the titre rising gradually and reaching its peak during the second week. In some cases it has been detectable for three to four weeks or longer. In a few cases, IgM appeared as late as the 11th week of the disease, then disappeared gradually after 1 week. In 67.9 percent of the cases studied, the IgM and IgG appeared simultaneously.

The titre of IgG rises gradually, with the increase continuing even when the IgM titre begins to decline. IgG could be discovered in 71.7 percent of the cases studied during the first 2-7 days of the disease, and in 90.6 percent of the cases within two weeks of the onset of the disease. The period of IgM presence in patients' serum was variable. In most cases it was measurable for two to four weeks, and disappeared one month after the onset of the disease.

CSO: 5400/4141

INFLUENZA VIRUS STRAINS ANALYZED

Beijing ZHONGHUA WEISHENGWUXUE HE MIANYIXUE ZAZHI [CHINESE JOURNAL OF MICROBIOLOGY AND IMMUNOLOGY] in Chinese No 6, Dec 83 pp 370-372

[Article by Ye Zhiping [0673 1807 1627], Zhang Zhen [1728 3791] and Yang Dongrong [2799 0392 2837], et al., all of the Institute of Virology, Chinese Academy of Medical Sciences, Beijing: "The Antigenic Variation of Neuraminidase of H3N2 Influenza Virus"]

[Summary] In this paper, the antigenic relationship of the neuraminidase of H3N2 strains is analyzed by the Triton X-100 method, which eliminates the influence of steric hindrance on the NI test by hemagglutinin, and the antigenic relationship of neuraminidase is compared with that of hemagglutinin. The results show that variants of H3N2 can be classed into three groups. The first group is comprised of strains isolated in 1968, represented by Beijing/1/68. The second group is comprised of strains isolated during the period from 1972 to 1975, represented by Guangdong/243/72. The third group is comprised of strains isolated during the period from 1977 to 1980, represented by Guangdong/38/77. The rate of variation of neuraminidase is less than that of hemagglutinin. The two probably vary independently.

CSO: 5400/4141



HBS/A ANTIBODY USED IN HBSAG DETECTION

Beijing ZHONGHUA WEISHENGWUXUE HE MIANYIXUE ZAZHI [CHINESE JOURNAL OF MICROBIOLOGY AND IMMUNOLOGY] in Chinese No 6, Dec 83 pp 381-383

[Article by Zhao Kesheng [6392 0344 0524], Gu Youmei [7357 0645 2734] and Wu Jiqiong [0702 4949 8825], all of Xinhua Hospital, Shanghai Second Medical College: "Application of Monoclonal Antibody Against HBs/a in Detecting HBsAg"]

[Summary] The purpose of this paper is to report the results of using McAb anti-HBs/a in the detection of HBsAg by solid phase radioimmunoassay (SPRIA) as well as their comparison with those of the commonly-used RPHA, ELISA and PcAb SPRIA methods. In this study, it has been shown that the positive detection rates of HBsAg by this method are 14.3 percent and 9 percent higher than those given by the RPHA and ELISA methods respectively. Moreover, the method using McAb anti-HBs/a has a much higher specificity and sensitivity resulting in precision and reliability. Based upon these data, the authors suggest that it may be worth recommending this method as one of the routine tests in detecting HBsAg.

CSO: 5400/4141

FUNCTIONAL COMPONENTS OF CHOLERA FILTRATE SEPARATED

Beijing ZHONGHUA WEISHENGWUXUE HE MIANYIXUE ZAZHI [CHINESE JOURNAL OF MICROBIOLOGY AND IMMUNOLOGY] in Chinese No 6, Dec 83 pp 391-394

[Article by Zhou Xueliang [0719 1331 5328], Yang Zongmo [2799 1350 2875] and Zhou Linfeng [0719 2651 7685], all of the Lanzhou Institute of Biological Products, Lanzhou: "Separation of Different Functional Components in Cholera Filtrate"]

[Summary] In *V. cholerae* filtrate there are at least two active components, namely neuraminidase and a non-specific inhibitor removing factor which can remove the hemagglutination inhibitor in rabbit serum. In submerged culture, both activity peaks could be detected during the sixth hour and reached a high level by the ninth hour. Then the activity of neuraminidase decreased rapidly and could not be detected during the 15th hour. However, the inhibitor removing activity remained at its high level for up to 24 hours. *V. cholerae* filtrate can be separated into three main peaks through Sephadex G-200 chromatography. The second peak represented neuraminidase which could hydrolyze a substrate in rabbit serum and release neuraminic acid, but had no influence on the activity of the rabbit serum inhibitor. The first and third peaks lacked neuraminidase activity, but were active in removing hemagglutination inhibitor from rabbit serum. Neuraminidase in the second peak was found to be a protein with M.W. 60,000 as measured in our laboratory. However, glycoprotein was mainly discovered in removing factors. Obviously, these components were different from neuraminidase in size and function.

9717

CSO: 5400/4141

HBcAg SYNTHESIZED, APPLIED TO HEPATITIS DIAGNOSIS

Beijing JIEFANGJUN YIXUE ZAZHI [MEDICAL JOURNAL OF CHINESE PEOPLE'S  
LIBERATION ARMY] in Chinese No 1, 20 Feb 84 pp 1-5

[Article by Ma Xiankai [7456 6343 0418], Luo Qinghua [5012 3237 5478] and  
Li Anli [2621 1344 7787], et al., all of the Institute of Basic Medical  
Sciences, Academy of Military Medical Sciences: "Synthesis of HBcAg in  
E. coli and Its Application in Diagnosis of Viral Hepatitis B"]

[Summary] HBcAg was synthesized in E. coli using recombinant DNA technology.  
The antigen in crude bacterial lysate was a satisfactory diagnostic reagent  
when used in ELISA for detecting antibodies to HBcAg in serum samples. It  
correlated well with results obtained by using HBcAg extracted from human  
liver and those from the corresponding Abbott kit. When compared with the  
routine laboratory diagnostic test using only RPHA for HBsAg, it gave  
8.9 percent and 16.5 percent higher positive cases (serum dilution 1:100)  
in screening samples from 2040 blood donors and 158 clinically suspected  
hepatitis patients respectively. The crude antigen can be purified by one  
step affinity chromatography separation.

9717

CSO: 5400/4136

PHILIPPINES

MEASLES EPIDEMIC KILLS 19 IN SIARGAO

Manila BULLETIN TODAY in English 30 Apr 84 p 16

[Text] Surigao City--A medical team from the provincial health office was dispatched to Siargao island last Wednesday by Assemblyman Constantino C. Navarro Sr. to check the spread of measles epidemic that has killed 19 persons most of whom were children in the fishing village of Libertad, General Luna, Surigao del Norte.

Acting on a report of Dr. Leonora Andanar, senior resident physician of the Siargao District Hospital in Dapa town, Navarro suspended his campaign here and went to the disease-stricken community to supervise medical operations to the sick residents.

Andanar reported that most of the fatalities were children below six years old. She said that of the 14 patients now confined in the hospital, 13 developed bronchopneumonial complications.

In Siargao island, Navarro was reported to have ordered highways district Engineer Conrado Laracas to improve the road network to make it easier for the inhabitants to bring their sick to the hospital (CAN Jr.)

CSO: 5400/4416

MALARIA IS BIGGEST NATIONAL HEALTH PROBLEM

Honiara SOLOMON STAR in English 4 May 84 p 12

[Article by Guadalcanal Health Division]

[Text]

Malaria is the biggest health problem in Solomon Islands.

Every year since 1976 the number of cases has been increasing until in 1983 there were 84,527 cases in the country.

Almost 45,000 of these cases were in Guadalcanal. We now have a serious malaria problem in Guadalcanal.

This situation is very worrying. Many people are becoming sick, are losing time from work or are unable to care properly for their families.

Worst of all, some people, mostly small children, are dying from malaria.

People from all over Solomon Islands travel to Guadalcanal to seek work, attend school or visit wankods.

When they return to their homes they carry malaria in their blood.

If a mosquito bites them it will carry malaria to other villagers.

Soon the whole village will have malaria.

It is not surprising that the Guadalcanal Plains

have been called the "Factori blong malaria".

Unless we do something about it the problem will not go away.

In fact malaria experts tell us the problem is going to get worse.

In 1984 MORE people will get sick, MORE people will lose time from work, MORE people will be unable to care for their families and MORE people will die.

That is, unless we do something about it.

We in Guadalcanal Province are aware of this problem.

We do not like to see people being sick and we do not like people to die.

We are prepared to work hard to stop this but we can only do it with your help.

EVERYONE MUST WORK TOGETHER TO FIGHT MALARIA. What can we do?

Malaria is spread from person to person by mosquitoes. When a mosquito bites a person with malaria it takes some mala-

ria into its body.

When the mosquito bites another person some of the malaria goes into that person.

To avoid malaria therefore:

- 1) We can kill mosquitoes.

The main way we do this in Solomon Islands is by spraying houses with DDT. After the mosquito bites it rests on a wall. If there is DDT on the wall the mosquito dies. So help the Spray-man to spray your house well. He is there to help you.

- 2) We can stop mosquitoes from breeding. Mosquitoes breed in stagnant water. Cleaning weeds away from streams, cleaning rubbish and draining pools of water will help.

- 3) We can stop mosquitoes from biting us. Mosquitoes bite mostly in the evening so sit inside your house in the evening. If you go out, wear long sleeved clothes. If possible, use a mosquito net and screen your house.

- 4) We can make sure when we get malaria we do not let the mosquitoes spread it to another person.

If you get sick with malaria, go quickly to your clinic.

If you wait, you give the mosquito time to carry malaria to your family.

Drink all the medicine the nurse gives you.

A full 3 - day course is needed to cure malaria.

If you get sick again, go back to the clinic and tell the nurse.

If we do all these things we will help fight malaria.

But malaria will be so bad in 1984 that these measures will not be enough.

Even if we do all these things well, more people will get sick. So Guadalcanal Province, with the help of the Ministry of Health & Medical Services is going to have a MASS DRUG ADMINISTRATION programme in North Guadalcanal.

This will affect everyone in North Guadalcanal from near Lambi to near Totongo (except those in Honiara).

In the next article I shall explain more about the Mass Drug Administration.

If you want to know more now or are interested to help contact your nurse or malaria technician. Or call in at the Guadalcanal Province Office.

We will be happy to talk to you.

CSO: 5400/4419

SWEDEN

# SWEDES ON EAST GERMAN CRUISE SHIP GET LEGIONNAIRES DISEASE

Stockholm DAGENS NYHETER in Swedish 8 May 84 p 13

[Article by Rolf Akerberg]

[Text] Goteborg--Preliminary tests have confirmed that passengers on the East German cruise ship Volkerfreundschaft, which arrived in Goteborg just over 1 week ago, are suffering from legionnaires disease. Most of the 430 passengers on the ship were Swedes.

Many on board had cold and flu symptoms. Two of the passengers were in worse condition than the others and were transported by ambulance to Ostra Hospital. Last weekend it was found that they had antibodies against legionella bacteria. As a result, further tests were made. The results are not yet available.

Last Saturday, 14 of the passengers were called to the infectious disease clinic at Ostra Hospital to be examined and to leave specimens. All had suffered from hoarseness, coughing, fever, backache, and diarrhea. None had symptoms that caused serious concern, however, according to Gunilla Ledin-Janson, a doctor at the infectious disease clinic.

It is not certain, according to Gunilla Ledin-Janson, that the disease originated on the ship. The two passengers who suffered the most came on board together when the ship was in port. The cruise lasted 3 weeks, leaving from Goteborg and visiting Bordeaux, Lisbon, Casablanca, Lanzarote, Funchal, Cherbourg, and London.

Legionnaires disease, which is described as a type of pneumonia, reportedly is not spread from person to person. Satisfactory antibiotics are now available to combat the disease.

Legionnaires disease appeared for the first time in 1976 at a convention of American war veterans in Florida. At that time, several hundred people became ill and about 30 died.

9336  
CSO; 5400/2527

## YUGOSLAVIA

### BRIEFS

TYPHOID OUTBREAK--Titova Mitrovica, 8 May (TANJUG)--A total of 71 persons so far have fallen ill with typhoid which appeared in Prvi Tunel near Titova Mitrovica. All of them are receiving hospital treatment in Titova Mitrovica or Pristina. Over 2,000 persons aged between 3 and 65, or two-thirds of the population of the mining settlement, have been vaccinated. The population is supplied with drinking water by water tankers, while the local water supply network which caused the disease is being disinfected. [Summary] [Belgrade TANJUG Domestic Service in Serbo-Croatian 1445 GMT 8 May 84 LD] Titova Mitrovica, May 9 (TANJUG)--Six new cases of typhoid in a mining settlement near Titova Mitrovica, a town in the south of the Yugoslav Province of Kosovo, have been reported since yesterday (Tuesday), bringing the total to 77. The conditions of all typhoid patients, hospitalized in Titova Mitrovica and Pristina, is improving. The vaccination of the inhabitants of the settlement is nearing completion and all necessary measures have been taken to prevent the disease from spreading. The area continues being supplied with water from truck tanks. [Text] [Belgrade TANJUG in English 1735 GMT 9 May 84 LD]

CSO: 5400/3007



BRIEFS

NEW SWINE DISEASE OUTBREAK--A new outbreak of swine disease has again been confirmed in Schleswig-Holstein, and 1,600 swine have been slaughtered in the areas of Bahrenhof and Brebel, where the disease has again been found on two farms. A spokesman for the Schleswig-Holstein Ministry of Agriculture said Tuesday in Kiel that the disease had already been discovered in the beginning of April and that dealing in swine from the two areas has been limited until 5 May. In December of last year swine disease broke out for the first time in Schleswig-Holstein in four years. The Danish authorities are afraid it will spread from the border country to Denmark where it will be able to damage Danish swine export as much as the latest foot and mouth disease attack. [Copenhagen BERLINGSKE TIDENDE in Danish 25 Apr 84 Sect III p 2] 9124

CSO: 5400/2525

# UNKNOWN DISEASE HITS FIELD RABBITS

Stockholm DAGENS NYHETER in Swedish 8 May 84 p 19

[Article by Lasse Johansson]

[Text] The Swedish rabbit population has been hit by a disease. As of March, no less than 150 field rabbits that had been found dead in gardens and fields had been sent to the National Veterinary Institute (SVA) in Uppsala.

"We usually receive some rabbits in the fall, but we have now received an unusually high number," said biologist Katarina Gustafsson of the game research division of SVA. "We suspect that a viral disease is responsible, but so far we have been unable to isolate any virus."

The rabbits that have been sent in have been in good condition, otherwise. The disease struck suddenly. Autopsies have revealed liver damage. Normally the organs are removed from the dead animals and their contents are examined for bacteria and parasites. In the case of the rabbits, an attempt is also made to infect healthy living animals. They are fed excrement from the dead rabbits and later examined to see if they have become ill. Such tests have been run on a small group of animals at SVA with no conclusive results. Now tests will be made on more health animals.

The field rabbits are a relatively new element in the Swedish fauna. Near the end of the last century Scanian landowners began importing the rabbits. Their population in Sweden reached a peak in the early 1950's. Since then there have been fewer and fewer of these animals.

A young field rabbit has little chance of surviving. Only two or three out of 10 become adults--and the adults also live dangerously. The most common unnatural causes of death are traffic (11 percent), agricultural equipment (20 percent), chemicals (17 percent), hunting (34 percent), and predators (18 percent).

During the past few decades there have been fewer and fewer field rabbits. Their population normally varies dramatically because the animals are sensitive to weather conditions and diseases, but the long-range reduction in their numbers is certainly due to changes in the habitats of the rabbits.

Along with other so-called field game such as partridge, pheasant, and wild rabbit, the field rabbit has become an increasingly rare element in our countryside. This is due in part to changes in farming techniques. The new agricultural methods have made it more difficult for the rabbits to survive. But these agricultural changes cannot explain a sudden epidemic, with 150 dead rabbits at SVA. Work is continuing there to discover the reason.

9336

CSO: 5400/2527

## BRIEFS

RABIES REAPPEARS--Recently, there has been a rash of deaths due to bites by rabid dogs. At hospitals with antirabies programs, many people wait in line for vaccination. Vaccines have been slipped out of some places, each dosage selling for hundreds of dong. The state has spent a large sum of money in importing and manufacturing the vaccine, but the demand for it still has not been satisfied. Many practitioners of oriental medicine took advantage of the situation to cheat the people, money was spent but patients still died. Local authorities have issued an order strictly banning all dogs. But in reality, the number of dogs being kept has increased. It is necessary to open an investigation and to stop people from keeping dogs and letting them roam in the streets. [Letter to the "Readers' Letters" column by Nguyen Hung from Soc Son, Hanoi] [Hanoi NHAN DAN in Vietnamese 13 Apr 84 p 2]

CSO: 5400/4420

COFFEE RUST DETECTED IN MAIN GROWING AREA

San Jose LA NACION INTERNACIONAL in Spanish 29 Mar 4-Apr 84 p 17

[Excerpts] Coffee rust is expanding toward the Central Valley of Costa Rica after having been confined for slightly more than 3 months to San Carlos and for a little more than 2 months to Guanacaste in the northern part of the country.

Two outbreaks appeared between 23 and 27 March on coffee plantations in the Central Valley: one in Cinco Esquinas de San Juan in Santa Barbara, Heredia; and another in Desamparados in Alajuela.

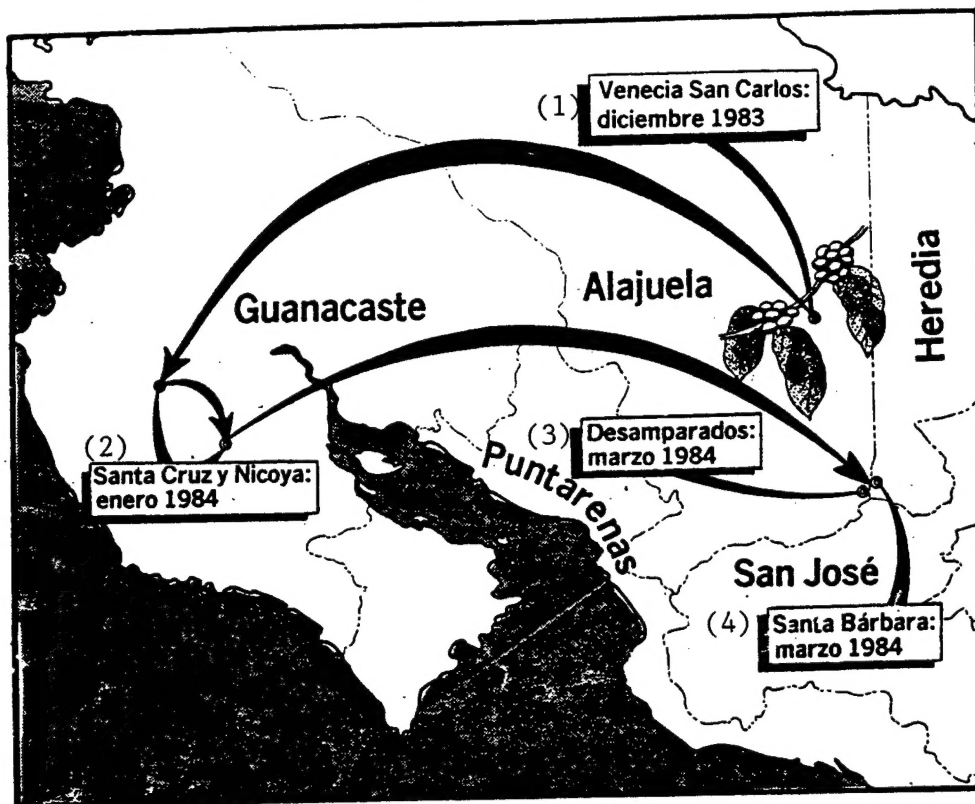
The one in Heredia was reported officially by the viceminister of agriculture and Livestock Ministry (MAG), who said that experts in this field had been transferred, just as in the case of Cinco Esquinas de San Juan, in order to apply agrochemical products as prevention and control measures against the disease.

According to engineer Gutierrez, the outbreak in the area of Santa Barbara was discovered in 32 coffee plants in a 7,000 square meter growing area (slightly less than 1 hectare), which was the property of Jorge Arguedas Carballo.

Mr Arguedas discovered the *Hemileia vastratix* on some plants, but to be certain that it was the fungus, explained Gutierrez, some coffee leaves were taken to the Agricultural Extension Agency in Alajuela, where the technicians of that agency confirmed that it was rust.

Gutierrez gave his assurances that "it is a slight, very mild outbreak of little concern, but it is a concrete, real fact that there is rust in the Central Valley," the main coffee-growing area of Costa Rica, in the outskirts of the capital.

As soon as the outbreak was confirmed, the MAG in San Jose was informed and phytopathologists from the Regional Agricultural Center of Alajuela were mobilized. They verified, for the first time, the attack of rust on a coffee plantation in the Central Valley.



- Key:
1. Venecia San Carlos: December 1983
  2. Santa Cruz and Nicoya: January 1984
  3. Desamparados: March 1984
  4. Santa Barbara: March 1984

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FAO TO ASSIST IN PEST CONTROL

Islamabad THE MUSLIM in English 28 Apr 84 p 3

[Text] Islamabad, April 27: Pakistan and the Food and Agriculture Organisation (FAO) will sign agreements for three projects to provide United Nations assistance for biological control of devastating cotton pests, agricultural research as well as technical assistance for the Agricultural Price Commission, during the visit of FAO Director General to Islamabad.

The FAO Director General is arriving here tomorrow to attend the 17th Regional Conference for Asia and the Pacific region opening on Sunday. He will call on President Ziaul Haq and deliver a policy statement to the plenary session of the Regional Conference.

The Federal Minister for Food, Agriculture and Cooperatives, Vice Admiral Mohammad Fazil Janjua, will sign the agreement on behalf of their respective sides.

Two agreements will be signed on April 29 under the FAO's Technical Cooperation Programme (TOP). TOP is a flexible programme that enables FAO to respond to country request for assistance in emergencies or short-term high impact projects.

Under the third agreement, FAO upon request of the Pakistan Government, will support a project in Multan to use beneficial insects to control bollworms that have laid waste cotton fields.

The FAO project will be at Multan and will use integrated pest management techniques. The second project will assist the Agricultural Prices Commission to prepare reports on critical areas for policy formulation, namely: cost of production methodology, marketing, agricultural price policy and comparative advantage.

Earlier TOP projects in Pakistan have ranged from assistance to the poultry vaccine production in Karachi to local council tree plantation programme.

The delegates of the 17th FAO Regional Conference for Asia and Pacific lauded the efforts of the Government of Pakistan for establishing a high class research station. The delegates gave this impression during their visit to the NARC today.--PPI

CSO: 5400/4716

END